OIPE					Docket Number (Optional) PM 99.001		Application Number		
I / · · SUI	PLEM	IENTAL INFORMAT		SURE CITATION	PM 99.001 10/073,799 Applicans				
NOU o -	8	(Use several sho	eets if necessary)		Jeffrey R. Bai	ley et al.			
(Use several sheets if necessary) NOV 0 7 2005 & (Use several sheets if necessary) Filing Date 02/1		Filing Date 02/11/200	02	Group An Unit 263	5				
NOV 0 7 2005 \$\frac{1}{2}\$ U.S. PATENT DOCUMENTS FILING DATE OF THE PROPERTY									
•EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCL	ASS	FILING DATE IF APPROPRIATE	
	ļ								
					 				
						ļ			
	1		FOREIGN I	PATENT DOCUMENT	 S		<u>l</u>		
	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS SUBCLASS Trans			nslation	
No.		2,409,722	07/06/05	GB ,			YES	NO	
		2,100,122	07700700	GB ,			- -		
	.	OTHER D	OCUMENT	S (Including Author, Title, Date, Per	tinent Pages, Etc.)		l		
E		"Assessment of Bore	ehole Seismic	Fracture" National Technic	al Information	Service,	(1988) 11 (gs. R	
									
						-	1,		
		-							
				· · · · · · · · · · · · · · · · · · ·					
		·							
EXAMINER		1		DATE CONSIDERED					
	<u> </u>	Edwards		12/20	105				
EXAMINER: conformance as	Initial if	citation considered, whet onsidered. Include copy o	her or not citation of this form with r	is in conformance with MPEP S ext communication to applicant.	ection 609; Draw	line throu	gh citation if r	ot in	

FORM PTO-A820 (also form PTO-1449) Copyright 1994-97 LegalStar

PO9A/REV03

Patent and Trademark Office* U.S. Department of Commerce

SHEET 1 OF 1

EXPERIENTAL INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

13		*\$/	0.5.111	TENT BOCCHIENT				
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME		CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
TE	1	2,986,214	05/1961	Wiseman, Jr. et al.	R	166	55	ATRONAS
1	2	3,118,501	01/1964	Kenley	R	166	55	
	3	3,662,833	05/1972	Kisling, III	R	166	314	
	4	4,102,401	07/1978	Erbstoesser	R	166	284	
	5	4,113,314	09/1978	Savanick et al.	R	299	4	
	6	4,244,425	01/1981	Erbstoesser et al.	R	166	284	
	7	4,428,422	01/1984	Laurent	R	166	212	
	8	4,637,468	01/1987	Derrick	R	166	297	
	9	4,671,352	06/1987	Magee, Jr. et al.	R	166	186	
	10	4,686,653	08/1987	Staron et al.	R	367	25	
	11	4,702,316	10/1987	Chung et al.	R	166	272	
	12	4,706,224	11/1987	Alford	R	· 367	41	
	13	4,776,393	10/1988	Forehand et al.	R	166	55	
	14	4,809,781	03/1989	Hoefner	R	166	273	
	15	4,870,580	09/1989	Lang et al.	R	702	14	
	16	4,881,207	11/1997	Dubesset et al.	R	367	31	
	17	4,888,740	12/1989	Brie et al.	R	367	30	
	18	4,910,718	03/1990	Horn	R	367	124	
	19	4,992,994	02/1991	Rambow et al.	R	367	25	
	20	5,010,527	04/1991	Mahrer	R	367	86	
	21	5,044,461	09/1991	Aronstam	R	181	102	
	22	5,060,751	11/1991	Kuhlman et al.	R	181	102	
	23	5,111,903	05/1992	Meynier	R	181	102	
	24	5,172,480	12/1992	Labuc et al.	R	33	304	
16	25	5,189,262	02/1993	Engler et al.	R	181	102	

EXAMINER

Edwards

DATE CONSIDERED

12/20/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-A820 (also form PTO-1449) Copyright 1994-97 LegalStar

PO9A/REV03

Patent and Trademark Office* U.S. Department of Commerce

SHEET 1 OF 4

SUPPLEMENTAL INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional) Application Number PM 99.001 10/073,799 Applicants Jeffrey R. Bailey et al. Group Art Unit Filing Date 02/11/2002 2635

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME		CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
18	26	5,212,354	05/1993	Miller et al.	R	181	108	
1	27	. 5,231,252	07/1993	Sansone	R	181	122	
	28	5,243,544	09/1993	Schoess	R	364	566	
	29	5,253,219	10/1993	Houston et al.	R	367	79	
	30	5,290,159	03/1994	Miller et al.	R	417	521	
	31	5,309,995	05/1994	Gonzalez et al.	R	166	284	
	32	5,314,019	05/1994	Honarpour	R	166	270	
	33	5,353,875	10/1994	Schultz et al.	R	166	297	
	34	5,363,094	11/1994	Staron et al.	R	340	854	
	35	5,370,545	12/1994	Laurent	R	439	190	
	36	5,475,187	12/1995	Omnes	D	181	102 -	
	37	5,481,502	01/1996	Cretin et al.	R	367	77	
	38	5,485,882	01/1996	Bailey et al.	R	166	284	
	39	5,550,785	08/1996	Laurent et al.	R	367	25	
	40	5,513,703	05/1996	Mills et al.	R	166	55	1
	41	5,579,844	12/1996	Rebardi et al.	R	166	296	
4	42	5,594,706	01/1997	Shenoy et al.	R	367	76	
	_43	5,747,750	- 05/1998-	-Bailey et al.	R	181	112	
E	44	5,771,170	06/1998	Withers et al.	R			
	45	5,803,178	09/1998	Cain	R	166	306	
	46	5,865,252	02/1999	van Petegem et al.	R	166	297	
	47	5,890,536	04/1999	Nierode	R	166	284	
	48	5,934,377	08/1999	Savage	R	166	281	
l	49	5,954,133	09/1999	Ross	R	166	297	
16	50	5,996,687	12/1999	Pringle et al.	R	166	66	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-A820 (also form PTO-1449) Copyright 1994-97 LegalSter

PO9A/REV03

Patent and Trademark Office* U.S. Department of Commerce

SHEET 2 OF 4

out TEM PREVIOUSLY CONSIDERED JE

SUPPLEMENTAL INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)	Application Number				
PM 99.001	10/073,799				
Applicants					
Jeffrey R. Bailey et al.					
Filing Date	Group Art Unit				
00/44/0000	0005				

						02/11/200)2	Gloup X	2635	
U.S. PATENT DOCUMENTS										
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME		CLASS	SUBCLASS		ASS FILING DA	
TE	51	6,016,727	05/1991	Wittrisch	R	181	10	102		
	52	6,186,230	02/2001	Nierode	R	166	25	60		
	53	6,189,621	02/2001	Vail, III	R	166	38	5		
	54	6,257,332	07/2001	Vidrine et al.	R	166	25	0		
	55	6,296,066	10/2001	Terry et al.	R	175	9:	2		
	56	6,488,116	12/2002	Bailey et al.	Ř	181	10	8		
TÉ	57	H1232	09/1993	DiSiena	1	367	5	7		
			FOREIGN 1	PATENT DOCUM	MENTS					
	REF	DOCUMENT NUMBER	DATE	COUNTRY		CLASS	ASS SUBCLASS		Trans	lation NO
1E	58	2 230 091	10/1990	GB	R			_		
Œ	59	0 082 524	06/1983	EP	·R					
TE	60	2275337	08/1994	GB	R					
16	61	0 138 271	05/1984	EP	R					
16	62	WO93/08485	04/1993	PCT	R					
Æ	63	2,044,877	12/1991	CA	R					
		OTHER D	OCUMENT	S (Including Author, Title,	Date, Perti	nent Pages, Etc.)				
(6)	64	Davis, C. et al (1988) Laser Sensors VI, ve			ysical Ap	plications", S	PIEFi	ber Op	otic and	
1/4	65	Dobecki, T. L., (198 Petroleum Engineer	33) "Hydraulic	Fracture Orientation	Using P	assive Boreh	ole Seis	mics,	' Socie	ty of
1	66	Engi, D. (1989) "A S	Spherical-Stock		for Micro	seismic Even	t Locati	on", C	ompute	ers &
(E	67	Geosciences, vol. 15, No. 7, pp. 1037-1052. Hartenberger, R. A. et al. (1970) "Influence of Number and Spacing of Sensors on the Effectiveness of Seismic Arrays", 32nd Meeting of the European Association of Exploration Geophysicists, Edinburgh, pp. 771-784.								
1	68	Ilderton, David C. e Wgaves, " 63rd SEC			g of Hydr	ofractures wi	th the A	id of C	Conical	R
EXAMINER				DATE CONS	SIDERED					
\triangleleft		Edwards		(-	2/20	105				
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in										

FORM PTO-A820 (also form PTO-1449) Copyright 1994-97 LegalStar

conformance and not considered. Include copy of this form with next communication to applicant.

PO9A/REV03

Patent and Trademark Office* U.S. Department of Commerce

SHEET 3 OF 4

SUPPLEMENTAL INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)

Docket Number (Optional)	Application Number
PM 99.001	10/073,799
Applicants	
Jeffrey R. Bailey et	al.
Filing Date	Group Art Unit
00/44/0000	0005

l		(Ose several sneets if necessary)	Jeffrey H. Bailey et a	
	•		Filing Date 02/11/2002	Group Art Unit 2635
	 -	OTHER DOCUMENTS (Including Author, Title, Date, Pe	rtinent Pages, Etc.)	
E	69	Kirichenko, Oleg V. et al. (1993) "Fiber-Optic Sensors for Vi Interferometry and Speckle-Interferometry Methods", SPIEF 2070, pp. 409-415.		
压生生	70	Lacy, L. L., (1984) "Comparison of Hydraulic-Fracture Orient Engineers, pp. 322-332.		R
1	71	Li, Y. G. et al. (1988) "Stress Orientation Inferred from Shear Cajon Pass", Geophysical Research Letter, vol. 15, No. 9, Pa	per No. 8L7356, pp. 9	97-1000. R
E	72	Mari, J. L. et al. (1989) "Well Seismic Part One: The Vertical Applications and Implementation", 1142 Revue de L'Institut F France, 35 pages of translation.	rancais du Petrole, 44	, No. 2, Paris,
E	73	Mykkeltveit, S. et al (1984) "Processing of Regional Seismic Arrays", Bulletin of the Seismological Society of America, vol.	74, No. 6, pp. 2313-2	333. R
E	74	Pechstedt, R. D. et al (1993) "Optical Fibre Accelerometers f SPIEFiber Optic and Laser Sensors XI, vol. 2070, pp. 352-3	or High Temperature A 59.	Applications",
Æ	75	Schlumberger Oilfield Review, pp. 10-14, Jan. 1994.		R
(m) (m) (m) (m) (m) (m)	76	Schmidt, M. et al (1989) "A Digitally-Controlled Broad-Band S Leipzig 98 1, S. pp. 84-87.		R
E	77	Sleefe, G. E., et al., (1993) "Observations of Broad-Band Mice 63rd SEG Meeting, Washington.	_	R
F	78	Sleefe, G.E., et al., (1991) "Experimental Study of an Advanc Receiver," 1991, 61st SEG Meeting, Houston, Texas.	•	R
E	79	Sleefe, G.E., et al., (1993) "Rapid Acquisition of High Resolut Data" Soc. of Exploration Geophysicist, 63rd Annual Mtg., War	shington, DC, 7 pages) R
E	80	Stewart, L., et al. (1992) "Acoustic-Emission Monitoring Durin Petroleum Engineers Formation Evaluation, pp. 139-144, 199	2.	R
	81	Thorne, B.J. et al (1988) "An Assessment of Borehole Seism Annual Technical Conference, Houston, TX, Paper No. 3, (Oc	t. 22-5 1988) pp. 123-	131. _R
(15)	82	Warpinski, N. R. et al. (1995) "Microseismic Mapping of Hydr Wireline Receivers", SPE 30507, Dallas, Texas, pp. 579-589.	aulic Fractures Using	Multi-Level
			·	
		·		

				<u> </u>
EXAMINER	1	Eduands DATE CONSIDERED	2/20/05	

FORM PTO-A820 (also form PTO-1449)

conformance and not considered. Include copy of this form with next communication to applicant. Copyright 1994-97 LegalStar

PO9A/REV03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in

Patent and Trademark Office* U.S. Department of Commerce

SHEET 4 OF 4